

CLAIMS

I/We claim:

1. A control system for a motor vehicle having an engine comprising:
 - an engine control unit for controlling the engine;
 - a driver accelerator control;
 - a driver braking control; and

 said driver accelerator control and said driver braking control providing to the engine control unit, respectively, a driver demand signal and a braking demand signal that indicate, respectively, the level of driver engine demand and the level of driver braking demand, the engine control unit being arranged to:

- a) calculate a first delay following the time at which the driver demand signal indicates a level of driver engine demand above a first predetermined level of driver engine demand;
 - b) calculate a second delay following the time at which the braking demand signal indicates a level of driver braking demand above a first predetermined level of driver braking demand;
 - c) determine a predetermined delay, the predetermined delay being the later of the first delay and the second delay; and
 - d) over-ride the driver demand signal to reduce engine power when, after the predetermined delay, both the driver demand signal and the braking demand signal are above predetermined levels of driver engine demand and driver braking demand.

2. A method of controlling the engine of a motor vehicle having an engine control unit, a driver accelerator control and a driver braking control, the method comprising the steps of:

- i) using the driver accelerator control to provide to the engine control unit a driver demand signal that indicates the level of driver engine demand;
- ii) using the driver braking control to provide to the engine control unit a braking demand signal that indicates the level of driver braking demand;
- iii) using the engine control unit to monitor both the driver demand signal and the driver braking demand signal;
- iv) calculating a first delay following the time at which the driver demand signal indicates a level of driver engine demand above said first predetermined level of driver engine demand;
- v) calculating a second delay following the time at which the braking demand signal indicates a level of driver braking demand above said first predetermined level of driver braking demand;
- vi) determining a first predetermined delay, the first predetermined delay being the later of the first delay and the second delay; and
- vii) over-riding the driver demand signal to reduce engine power when, after the first predetermined delay, both the driver demand signal and the braking demand signal are above a first predetermined level of driver engine demand and a first predetermined level of driver braking demand.

3. The method of Claim 2, in which the first predetermined level of driver engine demand is a zero level.

4. The method of Claim 2, in which the first predetermined level of driver braking demand is a zero level.

5. The method of Claim 2, in which the first delay is between 0.5 s and 1.5 s.

6. The method of Claim 2, in which the second delay is between 0.5 s and 1.5 s.

7. The method of Claim 2, in which in step vii) the over-riding of the driver demand signal continues at least until both the driver demand signal and the braking demand signal have fallen below a second predetermined level of driver engine demand and a second predetermined level of driver braking demand.

8. The method of Claim 7, in which in step vii) the over-riding of the driver demand signal continues for a second predetermined delay after both the driver demand signal and the braking demand signal have fallen below said second predetermined levels.

9. The method of Claim 7, in which the second predetermined level of driver engine demand is a zero level.

10. The method of Claim 7, in which the second predetermined level of driver braking demand is a zero level.

11. The method of Claim 7, in which the method comprises the steps of:

viii) calculating a third delay following the time at which the driver demand signal indicates a level of driver engine demand below said second predetermined level of driver engine demand;

ix) calculating a fourth delay following the time at which the braking demand signal indicates a level of driver braking demand below said second predetermined level of driver braking demand, said second predetermined delay being the later of the third delay and the fourth delay.

12. The method of Claim 11, in which the third delay is between 0.1 s and 0.5 s.
13. The method of Claim 11, in which the fourth delay is between 0.1 s and 0.5 s.